

British Columbia, and that a market could be found in Canada for certain Australian timbers which are specially adapted for railway ties. While the average life of a railway tie on the C. P. R. is from six to nine years the grey gum-wood, it is said that of Australia will endure for forty years for this purpose. There is also a demand in British Columbia for timber for piling purposes for use in wharves, breakwaters, etc., which will resist the destructive attacks of the *teredo* or sea spider. The native woods at present used for this purpose are protected with creosote and other preparations at a cost of 25 to 30 cents per running foot, and even after having been subjected to these expensive processes the life of piles averages less than ten years. It will readily be seen that the cost of renewing work of this kind at such frequent intervals is very great. It is said that the turpentine tree of New South Wales, when the bark is left on the wood, is absolutely proof against the attacks of the *teredo*. If this can be shown to be the case, and there exists an ample supply of this class of wood, there should be quite an extensive market found for it on the Pacific Coast. On the other hand there has been some export of British Columbia lumber to Australia, and inquiries are being received for British Columbia shingles. Galvanized iron appears to be at present largely used for roofing purposes in Australia, and it is believed that the British Columbia sawn shingle would be much better adapted for the purpose and would afford a more pleasing architectural effect.

THE O. A. A. CONVENTION.

The dullness of business which has given architects leisure to think will perhaps produce fruit in increasing the interest of the Convention which is to be held next January. We understand that invitations have been issued to several members to read a short paper at the Convention. These with the discussion that is likely to follow should make the proceedings lively and instructive. It is better that many should take part in the proceedings of a meeting of that kind than a few; and though a long paper is a serious undertaking, a short one, which does not attempt to treat of a whole subject but only one point, is within the powers of most men and does not require the expenditure of too much time. Paper reading is a valuable exercise for the reader himself. It enables him to "marshall his thoughts more orderly." When he has carried his subject about with him for a few days he finds his ideas about it much clearer and further reaching than they were when he began to write the paper.

ILLUSTRATIONS.

RESIDENCE ON LOWTHER AVENUE, TORONTO.—EDMUND BURKE, ARCHITECT.

MORTUARY CONSERVATORY AT MOUNT PLEASANT CEMETERY, TORONTO.—EDMUND BURKE, ARCHITECT.

The new mortuary has been built upon the foundations of the old vaulted structure, and no changes whatever were made to old front, facing Yonge street. The old building was covered with two semi-circular arches, above which was a single elliptical arch covered with earth. Dampness and decay had so affected the structure that it became unsafe, necessitating the entire removal of the arches to the level of the springing, about 4 feet above the floor of the mortuary.

The new walls were built on the old from this point up to the level of the roadway to the east, a total height of about 22 feet. A very heavy pressure of earth had to be provided for, necessitating large buttresses, thick walls with benches or steps on the outside, and the building of the whole in cement. The interior is faced with white brick.

The ceiling of the mortuary, forming the floor of the conservatory and forcing houses, is formed with 12" I beams at about 5 feet centres, with porous terra cotta arching plastered with Portland cement in the underside and covered with concrete above, forming a foundation for a granolithic floor in the forcing houses and tile in the conservatory and mortuary chapel.

The walls of the conservatory and potting houses to the height of about 4 feet are of pressed brick, both inside and out; above they are of wood and glass, as are also the roofs. The chapel and potting house are roofed with red tiles. The conservatory and chapel may be turned practically into one room, the enclosure of the chapel being formed with sliding glazed sashes. The bier is made to descend by means of a hand power lift, and

the opening in the floor of chapel is immediately closed by a pair of light folding doors. A low brass rail appropriately hung with curtains surrounds this opening, and a brass lectern is mounted at one end for the use of the officiating clergyman. A fan driven by an electric motor is provided for the ventilation of the mortuary chamber, so arranged that the air is drawn away from the vicinity of the opening for the bier. The heating is by hot water, the pipes, under the benches being 4" diameter and valved in sections for the control of varying temperature.

PAIR OF SEMI-DETACHED RESIDENCES, JARVIS ST., TORONTO, FOR MR. JAMES HEWLETT.—F. H. HERBERT, ARCHT.

Each of these houses contains a large reception hall divided from staircase hall by carved and fluted columns; drawing and dining rooms, the latter with handsome open pressed brick fireplace; kitchen, laundry and accessories, and bedroom, billiard room, 2 bath rooms, hot water heating, etc.

DESIGN FOR A SMALL STABLE,

with accommodation for two horses and two or three vehicles. Foundations to be of stone, first story of frame construction and clap-boarded, gables and roof to be shingled, and chimney built of brick. Estimated cost, \$300 to \$400.

ROAD REFORM.

Editor CANADIAN ARCHITECT AND BUILDER.

I am pleased to notice a decided step has been taken in the long discussed subject of road improvement. The Canadian Institute has done wisely in determining to call a convention for this purpose. It will be practically impossible for a great convention of this nature to be held, at which there will be a great gathering of those who are most directly interested in road reform, without practical benefit arising therefrom. The province is undoubtedly ripe for such an undertaking. Good roads mean more prosperity to farmers than railways, if they could only be made to believe it; the system of farming has made such great advances that farming of to-day is quite different to what it was 20 years ago. If the farmer then could afford to wait for two or three weeks for sleighing or until the frost was out of the ground he cannot do so now. Under the provisions of the municipal drainage, ditches and water courses and many other acts of parliament, municipal improvements of greater or less extent can be effected by means of assessments spread over a period of years. A similar system no doubt can be made applicable to road improvement; the assessment will be so light compared to the advantages obtained from improved roads the ratepayer will not feel it. I hope soon to witness great progress being made in this direction.

PROGRESS.

QUESTIONS AND ANSWERS.

[Readers are invited to ask through this department for any information which they may require with respect to the objects of the paper. Every effort will be made to furnish satisfactory answers to all such inquiries. Readers are requested to supply information which will assist us in our replies. The names and addresses of correspondents must accompany their communications, but not necessarily for publication.]

W. A. S., Tweed, Ont., writes: I understand that a person holding a School of Practical Science diploma in Architecture is required to serve under articles of apprenticeship for three years, under a member of the Association of Architects. Please let me know through the Question Department of your paper, the terms under which an apprentice serves. Has he to pay, or does he receive anything during his apprenticeship.

ANSWER.—The Ontario Association of Architects has made no rule as to money arrangements between apprentices and principals and we believe there is no rule in the practice of the members of the Association in the matter. The premium seems to be seldom if ever exacted. Some firms have no money consideration either way; some give a small salary, increasing each year.

PERSONAL.

Announcement is made of the intended marriage on the 15th of January, of Mr. Emile Dubé, a well-known contractor of Rivière du Loup, Quebec, to Miss Isabella Lemieux, of the same place.

In painting wood that has been long exposed to the weather, it is economical to add whiting to the oil paint for the first coat, and if the subsequent coats are of lead, or lead and zinc, the job will be thoroughly durable. About a quart of whiting paste to the gallon of oil paint will be about the proportion required, and as much more oil and turpentine may be added as may be necessary.